

**WHAT IS CLAIMED IS:**

1. A system for obscuring ambient noise, comprising:  
2       a background sound generator;  
3       a mixer coupled to said background sound generator; and  
4       a user interface, coupled to said mixer, that, upon a user  
5 command, causes said mixer to mix an output of said background  
6 sound generator with a transmitted signal.

2. The system as recited in Claim 1 wherein said background  
2 sound generator synthesizes said output.

3. The system as recited in Claim 1 wherein said background  
2 sound generator reproduces said output from stored background sound  
3 data.

4. The system as recited in Claim 1 wherein said background  
2 sound generator reproduces said output from a data stream received  
3 in real time.

5. The system as recited in Claim 1 wherein said output is  
2 selectable via said user interface.

6. The system as recited in Claim 1 wherein said background  
2 sound is selected from the group consisting of:

3 music,

4 white noise,

5 colored noise,

6 out-of-phase ambient noise, and

7 simulated alternative ambient noise.

7. The system as recited in Claim 1 wherein said system is  
2 associated with a selected one of:  
3 a wireless handset, and  
4 a wireline handset.

8. A handset comprising the system as recited in Claim 1.

9. The handset as recited in Claim 8 wherein said handset is  
2 selected from the group consisting of:  
3 a wireless handset, and  
4 a wireline handset.

10. Central office equipment comprising the system as recited  
2 in Claim 1.

11. A method of obscuring ambient noise, comprising:  
2 generating a background sound; and  
3 responding to a user command by mixing said background sound  
4 with a transmitted signal.

12. The method as recited in Claim 11 wherein said generating  
2 comprises synthesizing said background sound.

13. The method as recited in Claim 11 wherein said generating  
2 comprises reproducing said background sound from stored background  
3 sound data.

14. The method as recited in Claim 11 wherein said generating  
2 comprises reproducing said background sound from a data stream  
3 received in real time.

15. The method as recited in Claim 11 wherein said output is  
2 selectable via said user interface.

16. The method as recited in Claim 11 wherein said background  
2 sound is selected from the group consisting of:  
3 music,  
4 white noise,  
5 colored noise,  
6 out-of-phase ambient noise, and  
7 simulated alternative ambient noise.

17. The method as recited in Claim 11 wherein said method is  
2 carried out in a selected one of:  
3 a wireless handset,  
4 a wireline handset, and  
5 a central office.